

thoracic. Each commissure gives off a nerve three and one-half millimetres from the ganglion, going caudad. The distance of these nerves from the ganglion varies however (fig. II. o).

5. THE VAGUS NERVE.—The vagus nerve of *Corydalus cornutus* arises as two nerves from the crura cerebri, dorsad of the labial nerves (fig. IV. 9). These nerves pass cephalo-mesad, forming two arches, and unite in a ganglion on the median line dorsad of the palate. This ganglion (fig. I. 2, fig. IV. 2) is sometimes called the frontal ganglion, and is immediately cephalad of the supra-oesophageal ganglion. The vagus nerve departs from the caudad part of the ganglion, passes caudad between

the aorta and the oesophagus, and continues on the median line until it reaches a point two millimetres caudad of the frontal ganglion (fig. IV. 9). Here it enters another ganglion smaller than the frontal ganglion. This ganglion is also situated on the median line between the aorta and the oesophagus. Two nerves depart from this ganglion, going latero-caudad to the sides of the oesophagus (fig. I. 8, fig. IV. o). They continue their course caudad until they reach the pro-ventriculus, where they divide into many branches.

The vagus nerve gives branches to the aorta in the head, and numerous nerves are continually given off to the oesophagus.

SEXUAL CHARACTERS IN THE CHRYSALIDS OF *GRAPTA INTERROGATIONIS*.

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The publication in *PSYCHE* for November-December 1883, v. 4, p. 103-106, of the full text of Mr. Lintner's interesting paper on "A new sexual character in the pupae of some lepidoptera," reminds me of an observation which I made last summer on the chrysalids of *Grapta interrogationis*.

Desirous of obtaining fresh specimens of this species, I placed about a dozen elm-feeding larvae in a rearing cage, from which, in due time, I obtained eleven chrysalids. These were, in respect to color and ornamentation, of two distinct sorts. The larger proportion were of a dull, pale fuscous with darker

brown lateral stripes, dots and markings, without a trace of metallic ornamentation, while four were much paler in general color, inclining to golden brown, each ornamented with the eight brilliant, pale-golden, papillose dorsal spots by which this chrysalis is usually characterized. From each of the pale and gilded chrysalids emerged a female, while the seven dark and unornamented ones gave forth males exclusively. This observation may be a mere corroboration of a well known fact concerning the sexual characters of the species, but if so I have not met with it, or it has entirely escaped my memory.